Subject: Re: Moving Average on Hyperspectral dataset
Posted by JD Smith on Tue, 27 Mar 2007 00:38:38 GMT

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On Mon, 26 Mar 2007 16:03:28 -0700, rafaloos wrote:

> Hi, all ...
> We are trying to do a moving average on our dataset. The dataset comes
> from a Hyperspectral sensor and has 296 samples, 2000 lines and 492 bands.
> We need to go through each pixel and do a moving average on the spectral
> bands. So in the end we will have a dataset with the same dimensions as
> the original but with smooth spectra. And because of the moving average
> kernel size, we will have some empty bands at the beginning and at the
> end.
>
>
> Here is the code that we are using now ...
>
>>>> > IMAGE = (296, 2000, 492)

image=smooth(image,[1,1,width])

> With the loops the code takes about 3 hours ... Is there a way to speed it
> up ?

If that 1.2GB (*2) array is pushing your memory limits, consider doing
it in "chunks", e.g. 50 samples at a time.

JD